AMENDED CLAIM SET:

 (currently amended) A heat-curable fluoropolyether rubber composition comprising
(A) 100 parts by weight of a straight-chain perfluoropolyether compound represented by the general formula (1):

$$\begin{array}{c} Y_1 \\ Y_2 - Si \\ Y_3 \end{array} \\ \begin{array}{c} N_1 - C - CF \\ N_1 O CF_3 \end{array} \\ \begin{array}{c} CF_2 - CF_2 - CF_3 \\ CF_3 \\ \end{array} \\ \begin{array}{c} CF_2 - CF_2 - O \\ CF_3 \end{array} \\ \begin{array}{c} CF_2 - CF_3 - CF_3 \\ CF_3 \\ \end{array} \\ \begin{array}{c} Y_4 \\ Si - Y_5 \\ V_6 \end{array} \\ \end{array}$$

wherein X_1 and X_2 each are hydrogen, methyl, phenyl, or allyl, at least two three of Y_1 , Y_2 , Y_3 , Y_4 , Y_5 , and Y_6 are alkenyl groups, the remaining Y groups are substituted or unsubstituted monovalent hydrocarbon groups, r is an integer of 2 to 6, and m and n each are integers such that the number average molecular weight of the compound of formula (1) is 5000 to 25,000, wherein component (A) is one of the compounds represented by the following formulae (1-2) to (1-5) or a mixture thereof:

$$\begin{array}{c} \text{H}_2\text{C=HC} \\ \text{H}_2\text{C=HC} - \text{Si} \\ \text{CH}_3 \\ \text{X}_1 \text{ O} \text{ CP}_3 \\ \text{CP}_3 \\ \text{D} \end{array} \\ \begin{array}{c} \text{N}^-\text{C-}\text{CF}_2\text{-CF}_3\\ \text{CF}_3 \\ \text{CF}_3 \\ \text{D} \end{array} \\ \begin{array}{c} \text{CF-}\text{CF}_2\text{-O} \\ \text{CF}_3 \\ \text{CF}_3$$

$$\begin{array}{c} \text{H}_3\text{C=HC} \\ \text{H}_2\text{C=HC} - \text{SI} \\ \text{H}_2\text{C=HC} \\ \text{X}_1 \text{ O} \cdot \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{N=C-CF} \\ \text{CF}_3 \\ \text{CF}_3 \\ \text{m} \end{array} \\ \begin{array}{c} \text{CF}_2\text{CF}_2 \\ \text{CF}_2 \\ \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF-CF-C-N-CF-CH}_2 \\ \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CH=CH}_2 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \end{array} \\ \begin{array}{c} \text{CH=CH}_2 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \end{array} \\ \begin{array}{c} \text{CH=CH}_2 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \end{array} \\ \begin{array}{c} \text{CH=CH}_2 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \end{array} \\ \begin{array}{c} \text{CH=CH}_2 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \end{array} \\ \begin{array}{c} \text{CH=CH}_2 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \text{CH}_3 \\ \end{array} \\ \begin{array}{c} \text{CH=CH}_2 \\ \text{CH}_3 \\$$

and the alkenyl content in the compound is 0.008 to 0.12 mol/100 grams,

- (B) 1 to 100 parts by weight of a reinforcing filler, and
- (C) 0.1 to 5 parts by weight of an organic peroxide.
- 2. (cancelled).
- 3. (cancelled).
- 4. (original) The composition of claim 1 wherein the reinforcing filler (B) is carbon black, furned silica or furned silica treated with a surface treating agent containing silicon in a molecule.

- (currently amended) A rubber article comprising manufactured by heat-curing the curable fluoropolyether rubber composition of claim 1 in the heat-cured state.
- 6. (currently amended) The rubber article of claim 5, configured for use in automobiles, chemical plants, ink jet printers, semiconductor manufacturing lines, analytical or scientific instruments, medical equipment, aircraft or fuel cells.
- 7. (currently amended) The rubber article of claim 5, configured as which is a diaphragm, valve. O-ring, oil seal, gasket, packing, joint or face seal.
 - 8. 10. (cancelled).
 - 11. (new) A heat-curable fluoropolyether rubber composition comprising
- (A) 100 parts by weight of a straight-chain perfluoropolyether compound represented by the general formula (1):

$$\begin{array}{c} Y_{2} \\ Y_{3} \\ \end{array} \\ \begin{array}{c} N_{1} \\ N_{1} \\ \end{array} \\ \begin{array}{c} N_{1} \\ N_{1} \\ \end{array} \\ \begin{array}{c} CF_{2} \\ CF_{3} \\ \end{array} \\ \begin{array}{c} CF_{3} \\ CF_{3} \\ CF_{3} \\ \end{array} \\ \begin{array}{c} CF_{3} \\ CF_{3} \\ CF_{3} \\ \end{array} \\ \begin{array}{c} CF_{3} \\ CF_{3} \\ CF_{3} \\ CF_{3} \\ CF_{3} \\ \end{array} \\ \begin{array}{c} CF_{3} \\ C$$

wherein X_1 and X_2 each are hydrogen, methyl, phenyl, or allyl, at least two of Y_1 , Y_2 , Y_3 , Y_4 , Y_5 , and Y_6 are alkenyl groups, the remaining Y groups are substituted or unsubstituted monovalent hydrocarbon groups, r is an integer of 2 to 6, and m and n each are integers such that the number average molecular weight of the compound of formula (1) is 5000 to 25,000, wherein component (A) is a mixture of

(A-1) one of the compounds represented by the following formulae (1-2) to (1-5) or a mixture thereof:

$$\begin{array}{c} \text{H}_2\text{C=HC} \\ \text{H}_2\text{C=HC} - \text{Si} \\ \text{H}_3\text{C=HC} \\ \text{X}_1 \\ \text{O} \text{ CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_2 - \text{CF}_2 \\ \text{CF}_3 \\ \text{O} \end{array} \\ \begin{array}{c} \text{CF}_2 - \text{CF}_2 \\ \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_2 - \text{CF}_2 - \text{O}_2 \\ \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 - \text{CF}_2 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_3 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{$$

$$\begin{array}{c} \text{H}_2\text{C=HC} \\ \text{H}_2\text{C=HC} \\ \text{H}_2\text{C=HC} \\ \end{array} \\ \begin{array}{c} \text{N-C-CF} \\ \text{H}_2\text{C=HC} \\ \end{array} \\ \begin{array}{c} \text{N-C-CF} \\ \text{X}_1 \\ \text{O} \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF}_2 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF-CF}_2 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CF-CF}_2 \\ \text{CF}_3 \\ \text{CF}_3 \\ \end{array} \\ \begin{array}{c} \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \end{array} \\ \begin{array}{c} \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \end{array} \\ \begin{array}{c} \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \end{array} \\ \begin{array}{c} \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \end{array} \\ \begin{array}{c} \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \text{CH=CH}_2 \\ \end{array} \\ \begin{array}{c} \text{CH=CH}_2 \\ \text$$

and

(A-2) a compound represented by the following formula (1-1):

and the alkenyl content in the compound is 0.008 to 0.12 mol/100 grams.

- (B) 1 to 100 parts by weight of a reinforcing filler, and
- (C) 0.1 to 5 parts by weight of an organic peroxide.
- 12. (new) The composition of claim 11, wherein the reinforcing filler (B) is carbon black, fumed silica, or fumed silica treated with a surface-treating agent containing silicon in a molecule.

- 13. (new) A rubber article manufactured by heat-curing the curable fluoropolyether rubber composition of claim 11.
- 14. (new) The rubber article of claim 13, configured for use in automobiles, chemical plants, ink jet printers, semiconductor manufacturing lines, analytical or scientific instruments, medical equipment, aircraft, or fuel cells.
- 15. (original) The rubber article of claim 13, configured as a diaphragm, valve, O-ring, oil seal, gasket, packing, joint, or face seal.